2018 Annual Water Quality Report for the Town of North East Water Department

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by THE TOWN OF NORTH EAST is surface water.
If you want to learn more please attend any of our regularly scheduled Town meetings. They are held on the second and fourth Wednesday of every month at the North East Town Hall Meeting Room at 7:00 p.m.

Rolling Mill Water Treatment Plant
39 Rolling Mill Lane
North East, MD 21901
410-287-8102

Leslie Water Treatment Plant
39 Leslie Road
North East, MD 21901
410-287-8102

Source of Drinking Water
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.
Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm runoff, and septic systems.

Radioactive contaminants, which can be naturally –occurring or be the result of oil and gas production and mining activities.

Drinking water including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health side effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

A source water assessment was performed by MDE and is available on their website, mde.maryland.gov.

Regulations and Contaminants
In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population.
Immuno-comprised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections.

These people should week advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at
http://www.epa.gov/safewater/lead.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using for drinking or cooking.

Use Water Wisely
Think about your water-use habits. Make every drop count.

In the Bathroom
Your toilet is the biggest water user in the house. It uses 1.6 to 5 gallons down the drain per flush.

Your shower uses 2-5 gallons per minute.

Your sink faucet uses about 2.5 gallons per minutes. Think about turning the water off while brushing your teeth or shaving.

In the Kitchen
At the sink, use a basin for washing and rinsing dishes or washing vegetable instead of letting the water run.

Only run the dishwasher when it is full.

In the Laundry
Adjust the washing machine setting to match the amount of clothes being washed.

Outdoors
Use a bucket rather than running a hose to wash your car.

Water plants in early morning

By reducing your outdoor water use, either by cutting back on irrigation or planting more drought tolerant landscaping, you can dramatically reduce your overall water use.

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2018 Regulated Contaminants Detected

Lead and Copper
Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites over AL	Units	Violation	Likely Source of Contamination
Copper	08/08/2017	1.3	1.3	0.05	0	ppm	Copper	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/08/2017	0	15	2	0	ppb	Lead	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures; some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Contaminant Level or MCL	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Level 1 Assessment:	A Level I assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Maximum Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why any E coli MCL violation has occurred and/or why total coliform bacteria have been found in our system on multiple occasions.
Maximum Residual Disinfectant Level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal or MRDLG:	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
na:	not applicable
mrem:	millirems per year (a measure of radiation absorbed by the body).
ppb:	micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Disinfectants and Disinfection By-Product	Collection Date	Highest Level Detected	Range or Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2018	1.1	1 – 1.1	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAAS)	2018	34	7.1 – 55.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	52	9.8 - 91	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range or Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2018	0.0307	0 – 0.0307	2	2	ppm	N	Discharge of drinking wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2018	0.2	0 -0.3	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2018	3	0 – 2.7	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range or Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2,4-D	2018	1.05	0 1.05	70	70	Ppb	N	Runoff from herbicide used on row crops.
Dalapon	2018	1.29	0 -1.29	200	200	Ppb	N	Runoff from herbicide used on rights of way.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1.0 NTU	0.29 NTU	N	Soil runoff

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration

Lowest monthly & meeting limit	0.3 NTU	100%	N	Soil runoff

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Violations Table

Total Organic Carbon

Total organic carbon has no health effects. However, total organic carbon provides a medium for the information of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health.

Violation Type	Violation Begin	Violation End	Violation Explanation
Monitoring, Routine (DBP), Major	06/01/2018	06/30/2018	We failed to test our drinking water for the contaminant and period indicated. The sample was collected by the lab for the period indicated, but was spilled at the lab. We were not notified before the end of the month so that another sample could be collected. We have hired a new lab to prevent this in the future.